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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,489	03/15/2001	Uk-Jin Kang	678-604(P9457)	5670
28249 7590 03/21/2007 DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. SUITE 702 UNIONDALE, NY 11553			EXAMINER CHEN, ALAN S	
			ART UNIT 2182	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/809,489	Applicant(s) KANG ET AL.	
	Examiner Alan S. Chen	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/08/2007 have been fully considered but they are not persuasive. Examiner's rebuttal is given below.
2. Applicant first argues (*page 5, third paragraph of Remarks*) the prior art reference to Curry does not disclose uploading the HLR database to a remote client upon authorization.

Examiner disagrees. It must be first pointed out that nowhere in the claim language describes whether the database in its entirety is uploaded or some fraction of it. Secondly, at least for the currently amended claim 1, the language is ambiguous as to the direction of upload and updating. In claim 1, the claim limitation "...wherein the web server authorizes the remote client to update a database through a predetermined authentication procedure, and uploads the database upon receipt of an upload request for the database from the client" can be read as updating and uploading data on the database *using information from the client* and not the view of sending the contents of the database *back to the client*. Basically, it is ambiguous the direction of data transfer for the "upload". Turning to Curry, one clearly sees that a web server (*Fig. 1, element 33*) authorizes the remote client (*Fig. 1, element 1, handsets are remote clients attached to the gateway system, element 5*) to update the database with information (*Column 10, lines 60+ discloses verification of authorization to use and manipulate HLR database with billing information and identification information of the handset and gateway*). The recording of the identity of the handset on the database is itself sufficient

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to meet the limitation regarding uploading. In the case where uploading is viewed as transfer of data from the database to the remote client, Curry clearly indicates billing information is provided to the wireless gateway system for the handset (*Column 10, lines 61-67*) which is equivalent to uploading parts of the database.

3. The remaining arguments presented by the Applicant (*page 5, last paragraph of Remarks*) overlap substantially with the previous argument and therefore Examiner's rebuttal is reapplied. The "predetermined authentication procedure" is equated to verification mode/process described by Curry (*Column 10, lines 60+*). The "upload request" is the request from either the handset/gateway system that initiates the verification mode. It can also be the confirmation of authorization sent from the database to the handset/gateway system, depending on what which direction is viewed as "uploading".

4. Examiner prior art rejection is maintained and reiterated below in addition to new claim objections stemming from the newly amended claims.

Claim Objections

5. Claim 4 is objected to because of the following informalities: it is not identical to the previously present claims submitted on 04/20/2006. Line 8 has a misspelling "Brach". Line 10, the word "site" should be -PBX-. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 and 3-8 are rejected under 35 USC 103(a) as being unpatentable over Curry in view of Neumann.

10. Per claim 1, Curry discloses a user programming system (*Fig. 1 is a system with PBX in Wireless gateway system, element 5*) for a PBX (*Fig. 1, element 5, details shown in Fig. 2*), the system comprising: a connection board located at the PBX (*Fig. 2, element 69 has the connections board; Fig. 3 details element 69, e.g., T1/LAN/ISDN card all show connection of some form to the Internet*) with a unique internet Protocol

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address (at minimum, T1 card connection to ISP/Router must have an IP address;
Column 8, lines 5-20 states each machine on the Internet has a unique number permanently or temporarily assigned to it) and connected to the Internet (Fig. 1, element 31), and a web server (Fig. 1, element 33 is the home register database which determines how/where to route a call between the caller, Fig. 1, element 1 and another person; Column 9, lines 65+) being coupled to a remote client (various clients throughout the system shown in Fig. 1, interact with the server, element 33; the HLR server for instance services the DNS server element 51 which must interact with the HLR server, element 33, in order to properly route communications to the appropriate locations; more specifically with regard with the PBX, the handset, elements 1, connected to the PBX are the direct clients because the HLR server ultimately determines how to route calls made from these handsets, Column 10, lines 65+), the web server connected to the PBX through the Internet (Fig. 1, element 5 and element 33 are connected through the Internet, element 31), for managing a database (HLR database in Fig. 1, element 33) of a user program for the PBX (user program for PBX is programming on server that facilitates how to route calls from handsets on the PBX, column 10, lines 65+). Curry further discloses the HLR database can be implemented in any system accessible via the network shown in Fig. 1, element 31 (Column 11, lines 1-11). Curry further discloses the web server authorizes the remote client to update a database through a predetermined authentication procedure (Column 10, lines 60+, PBX system, element 5 communicates with HLR server to verify authorization) and uploads the database upon receipt of an upload request for the database from the client

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(after verification, the HLR database is updated/uploaded with handset, e.g., the remote client, information as stated in Column 11, lines 1+, "HLR database 33 also records the identity of the system 5 currently registering the handset 1"; the destination site would be the wireless gateway system, element 5).

Curry does not disclose expressly the HLR database is located at the PBX site, *(Fig. 1, element 5 and Fig. 2).*

Neumann discloses a network system similar to Curry's where communication is made between disparate systems such as PCs *(Fig. 1, element 134-138)*, PSTN network devices *(Fig. 1, element 122-124)* and a PBX site *(Fig. 1, element 110)*.

Neumann further discloses managing a database at the PBX site *(Fig. 5, element 532)*.

Neumann and Curry are analogous art because they are from the same field of endeavor in using the Internet to communicate between disparate communication systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the database that Curry accesses and manages *(Fig. 1, element 33, HLR Database)* to be located at the PBX site itself *(Fig. 5, element 2)*.

The suggestion/motivation for doing so would have been both that Curry himself suggests the flexibility of where the database is located *(Column 11, lines 1-10; database can be located in any system connected to the Internet, as a matter of design choice)*, as well as the reduced latency required to access and communicate data to/from the database if the database was located at the PBX site. Neumann suggests the latter since the database has information related to the PBX at the enterprise site

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(Fig. 1, element 110). It would have been advantageous for Curry to do this as well since the Access Manager (Fig. 2, element 67) at the PBX site frequently accesses and communicates with the HLR database (Column 10, lines 1-10).

Therefore, it would have been obvious to combine Curry with Neumann for the benefit of reduced latency in transactions between the access manager and the HLR database.

11. Per claims 3, Curry combined with Neumann discloses claim 1, Curry further discloses using an Internet Protocol, where IP is a point-to-point protocol (Column 6, lines 25-35 discloses PPP; TCP/IP, broadly used for the Internet is a point to point protocol, having a source and destination addresses in the packet, etc).

1. Per claim 4, Curry discloses a user programming method (Fig. 1 allows PBX in Wireless gateway system, element 5 to communicate and update other systems, e.g., HLD DB, element 33) for a PBX (Fig. 1, element 5, details shown in Fig. 2), the method comprising: connecting a LAN connection board to the internet (Fig. 2, element 69 has the connections board; Fig. 3 details element 69, e.g., T1/LAN/ISDN card all show connection of some form to the Internet); connecting a remote client to the Internet (Fig. 1, element 31; various remote clients connected to Internet); connecting a web server, through the Internet, to the LAN connection board and the remote client (Fig. 1, element 33 is the home register database which determines how/where to route a call between the caller, Fig. 1, element 1 and a another person; Column 9, lines 65+; various clients throughout the system shown in Fig. 1, interact with the server, element 33; the HLR server for instance services the DNS server element 51 which must interact with the

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HLR server, element 33, in order to properly route communications to the appropriate locations; more specifically with regard with the PBX, the handset, elements 1, connected to the PBX are the direct clients because the HLR server ultimately determines how to route calls made from these handsets, Column 10, lines 65+), authorizing the web server to update a database system after a predetermined authentication procedure (Column 10, lines 60+, PBX system, element 5 communicates with HLR server to verify authorization); and generating an upload request of the updated database to upload the database of the key phone system (after verification, the HLR database is updated/uploaded with handset, e.g., the remote client, information as stated in Column 11, lines 1+, "HLR database 33 also records the identity of the system 5 currently registering the handset 1"; the destination PBX would be the wireless gateway system, element 5).

Curry does not disclose expressly the HLR database is located at the PBX destination site, (Fig. 1, element 5 and Fig. 2).

Neumann discloses a network system similar to Curry's where communication is made between disparate systems such as PCs (Fig. 1, element 134-138), PSTN network devices (Fig. 1, element 122-124) and a PBX site (Fig. 1, element 110). Neumann further discloses managing a database at the PBX site (Fig. 5, element 532).

Neumann and Curry are analogous art because they are from the same field of endeavor in using the Internet to communicate between disparate communication systems.

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the database that Curry accesses and manages (*Fig. 1, element 33, HLR Database*) to be located at the PBX site itself (*Fig. 5, element 2*).

The suggestion/motivation for doing so would have been both that Curry himself suggests the flexibility of where the database is located (*Column 11, lines 1-10; database can be located in any system connected to the Internet, as a matter of design choice*), as well as the reduced latency required to access and communicate data to/from the database if the database was located at the PBX site. Neumann suggests the latter since the database has information related to the PBX at the enterprise site (*Fig. 1, element 110*). It would have been advantageous for Curry to do this as well since the Access Manager (*Fig. 2, element 67*) at the PBX site frequently accesses and communicates with the HLR database (*Column 10, lines 1-10*).

Therefore, it would have been obvious to combine Curry with Neumann for the benefit of reduced latency in transactions between the Access Manager and the HLR database.

2. Per claim 5, Curry combined with Neumann discloses claim 4, wherein the LAN connection board is connected to the Internet by routing (*Fig. 3A, LAN card attached to Internet, element 31 by routing through wires*).

3. Per claim 6, Curry combined with Neumann discloses claim 4, wherein Curry further discloses the remote client is connected to the Internet through the LAN connection board to execute a remote program for a PCMMC (*the handset, element 1, communication over PBX and Internet is by definition a man machine communication*,

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e.g., routing voice over a digital computer network, which is implemented via a program; note any program among the chain of programs that allows the handset to communicate with another resource in system 1 can be construed as the remote program here).

4. Per claim 7, Curry discloses a method for sending a message utilized by a user program for a PBX (*Fig. 1 allows PBX in Wireless gateway system, element 5 to communicate and update other systems, e.g., HLD DB, element 33, the message being a request from the Access Manager, Fig. 2, element 67*), the method comprising: connecting a LAN connection board in the PBX to a web server through the internet (*Fig. 2, element 69 has the connections board; Fig. 3 details element 69, e.g., T1/LAN/ISDN card all show connection of some form to the Internet; Fig. 1, elements 33 and 51 are web servers Access Manager communicates with*); requesting access to the web server, by an Internet Protocol of the web server, to execute a PCMMC (*Fig. 1, element 33 is the home register database on one of the web servers, which determines how/where to route a call between the caller, Fig. 1, element 1 and a another person; Column 9, lines 65+; various clients throughout the system shown in Fig. 1, interact with the server, element 33; the HLR server for instance services the DNS server element 51 which must interact with the HLR server, element 33, in order to properly route communications to the appropriate locations; more specifically with regard to the PBX, the handset, elements 1, connected to the PBX are the direct clients because the HLR server ultimately determines how to route calls made from these handsets, Column 10, lines 65+; PCMMC is the handset, element 1, once executed, allows communication with another resource on network*), authenticating, by utilizing the web server, access to

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the web server (*Column 10, lines 60+, PBX system, element 5 communicates with HLR server to verify authorization*); selecting an intended PBX site for programming (*once the authentication is successful, the PBX site, Fig. 1, element 5 is selected in the sense that is registered in the HLR database*); connecting a client to a database for programming (*HLR database, element 1, element 33 is connected to PBX site, element 5*); updating the database and storing the updated database and requesting the web server to upload the updated database whereby the updated database is transferred to the PBX of the intended PBX site (*after verification, the HLR database is updated/uploaded with handset, e.g., the remote client, information as stated in Column 11, lines 1+, "HLR database 33 also records the identity of the system 5 currently registering the handset 1"*).

Curry does not disclose expressly the HLR database is located at the PBX destination site, (*Fig. 1, element 5 and Fig. 2*).

Neumann discloses a network system similar to Curry's where communication is made between disparate systems such as PCs (*Fig. 1, element 134-138*), PSTN network devices (*Fig. 1, element 122-124*) and a PBX site (*Fig. 1, element 110*).

Neumann further discloses managing a database at the PBX site (*Fig. 5, element 532*).

Neumann and Curry are analogous art because they are from the same field of endeavor in using the Internet to communicate between disparate communication systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the database that Curry accesses and manages (*Fig. 1, element 33, HLR Database*) to be located at the PBX site itself (*Fig. 5, element 2*).

The suggestion/motivation for doing so would have been both that Curry himself suggests the flexibility of where the database is located (*Column 11, lines 1-10; database can be located in any system connected to the Internet, as a matter of design choice*), as well as the reduced latency required to access and communicate data to/from the database if the database was located at the PBX site. Neumann suggests the latter since the database has information related to the PBX at the enterprise site (*Fig. 1, element 110*). It would have been advantageous for Curry to do this as well since the Access Manager (*Fig. 2, element 67*) at the PBX site frequently accesses and communicates with the HLR database (*Column 10, lines 1-10*).

Therefore, it would have been obvious to combine Curry with Neumann for the benefit of reduced latency in transactions between the access manager and the HLR database.

5. Per claim 8, Curry combined with Neumann discloses claim 7, wherein the PCMMC can be implemented through the web server at a remote location (*Fig. 1, other handsets, e.g., elements 21 and 29 are implemented with web server, element 27, at a remote location relative to the PBX site, element 5*).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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ASC
03/17/2007



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SUPERVISORY PATENT EXAMINER
3/19/07